# TITLE 62: MINING CHAPTER I: DEPARTMENT OF NATURAL RESOURCES

# PART 1828 SPECIAL PERMANENT PROGRAM PERFORMANCE STANDARDS--IN SITU PROCESSING

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AUTHORITY: Implementing and authorized by the Surface Coal Mining Land Conservation and Reclamation Act [225 ILCS 720].

SOURCE: Adopted at 4 Ill. Reg. 37, p. 1, effective June 1, 1982; codified at 8 Ill. Reg. 9364; amended at 11 Ill. Reg. 8517, effective July 1, 1987; recodified from the Department of Mines and Minerals to the Department of Natural Resources at 22 Ill. Reg. 7712.

### Section 1828.1 Scope

This Part sets forth special environmental protection performance, reclamation and design standards for in situ processing activities.

(Source: Added at 11 Ill. Reg. 8517, effective July 1, 1987)

#### Section 1828.2 Objectives

This Part is intended to ensure that all in situ processing activities are conducted in a manner which preserves and enhances environmental values in accordance with the Surface Mining Control and Reclamation Act of 1977 (30 U.S.C. 1257 et seq.) (the Act). This Part provides additional performance, reclamation, and design standards to reflect the nature of in situ processing.

# **Section 1828.11** In Situ Processing: Performance Standards

- a) The person who conducts in situ processing activities shall comply with 62 Ill. Adm. Code 1817 and this Section.
- b) In situ processing activities shall be planned and conducted to minimize disturbance to the prevailing hydrologic balance by:

- 1) Avoiding discharge of fluids into holes or wells, other than as approved by the Illinois Department of Natural Resources (Department);
- 2) Injecting process recovery fluids only into geologic zones or intervals approved as production zones by the Department;
- 3) Avoiding annular injection between the wall of the drill hole and the casing; and
- 4) Preventing discharge of process fluid into surface waters.
- e) Each person who conducts in situ processing activities shall submit for approval as part of the application for permit under 62 Ill. Adm. Code 1785.22, and follow after approval a plan that ensures that all acid-forming, toxic-forming, or radioactive gases, solids, or liquids constituting a fire, health, safety, or environmental hazard and caused by mining and recovery process are promptly treated, confined, or disposed of, in a manner that prevents contamination of ground and surface waters, damage to fish, wildlife and related environmental values, and threats to the public health and safety.
- d) Each person who conducts in situ processing activities shall prevent flow of the process recovery fluid:
  - 1) Horizontally beyond the affected area identified in the permit; and
  - 2) Vertically into overlying or underlying aquifers.
- e) Each person who conducts in situ processing activities shall restore the quality of affected ground water in the permit area and adjacent area, including ground water above and below the production zone, to the approximate premining levels or better, to ensure that the potential for use of the ground water is not diminished.

(Source: Amended at 11 Ill. Reg. 8517, effective July 1, 1987)

## **Section 1828.12** In Situ Processing: Monitoring

a) Each person who conducts in situ processing activities shall monitor the quality and quantity of surface and ground water and the subsurface flow and storage characteristics, in a manner approved by the Department under 62 Ill. Adm. Code 1817.41, to measure changes in the quantity and quality of water in surface and ground water systems in the permit area and in adjacent areas.

b) Air and water quality monitoring shall be conducted in accordance with monitoring programs approved by the Department as necessary according to appropriate Federal and State air and water quality standards.

(Source: Amended at 11 Ill. Reg. 8517, effective July 1, 1987)